

Application No. 10/740,747
Amendment dated January 23, 2006
Reply to Office Action of November 3, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A device for insertion between two boney structures for maintaining spacing and facilitating bone fusion comprising:
an elongated body having an outer surface extending along a longitudinal axis between a distal end and a proximal end;
a helical thread ~~pattern-formed on~~around at least a portion of said outer surface, ~~said thread including at least one deviation adapted elongated body and defining a forward insertion rotation direction and a backward unscrewing rotation direction; and~~
~~means for impaling adjacent bone structures to resist backward rotation of said elongated body once it is inserted~~ between the boney structures~~into bone~~.

Claims 2-9 (cancelled).

10. (new) The device of claim 1, wherein said device is a spinal implant adapted for insertion into an implantation space between two adjacent vertebral bodies of the human spine.
11. (new) The device of claim 10, wherein said proximal end of said implant is adapted to be wholly contained within the implantation space.
12. (new) The device of claim 1, wherein said elongated body includes at least one opening from one portion of said outer surface to another portion of said outer surface to permit bone growth from one of the boney structures to another of the boney structures through said elongated body.
13. (new) The device of claim 12, wherein said elongated body includes a hollow interior in communication with said at least one opening.
14. (new) The device of claim 12, wherein said at least one opening interrupts said helical thread.

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15. (new) The device of claim 1, wherein a portion of said helical thread is twisted to resist backward rotation of said elongated body.
16. (new) The device of claim 1, wherein a portion of said helical thread is blunted to resist backward rotation of said elongated body.
17. (new) The device of claim 1, in combination with a fusion promoting material.
18. (new) The device of claim 17, wherein said fusion promoting material includes bone.
19. (new) An implant for insertion at least in part between two portions of bone, said implant comprising:
 - a body having a leading end, a trailing end opposite said leading end, and a mid-longitudinal axis through said leading and trailing ends, said body having an exterior surface adapted to contact the portions of bone; and
 - at least one surface projection extending from said exterior surface, said at least one surface projection being adapted to penetrate the portions of bone when said body is inserted between the portions of bone with a forward rotation of said body about its mid-longitudinal axis, said at least one surface projection being configured to resist backward rotation of said body once said body has been inserted between the portions of bone.
20. (new) The implant of claim 19, wherein said implant is a spinal implant adapted for insertion into an implantation space between two adjacent vertebral bodies of the human spine.
21. (new) The implant of claim 20, wherein said trailing end of said implant is adapted to be wholly contained within the implantation space.
22. (new) The implant of claim 19, wherein said body includes at least one opening from one portion of said exterior surface to another portion of said exterior surface to permit bone growth from one of the portions of bone to another of the portions of bone through said body.
23. (new) The implant of claim 22, wherein said body includes a hollow interior in communication with said at least one opening.

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24. (new) The implant of claim 22, wherein said at least one opening interrupts said at least one surface projection.
25. (new) The implant of claim 19, wherein said at least one surface projection is a thread.
26. (new) The implant of claim 19, wherein said at least one surface projection is a tab.
27. (new) The implant of claim 19, wherein said at least one surface projection is interrupted.
28. (new) The implant of claim 19, wherein said at least one surface projection is twisted to resist backward rotation of said body once said body has been inserted between the portions of bone.
29. (new) The implant of claim 19, wherein said at least one surface projection is blunted to resist backward rotation of said body once said body has been inserted between the portions of bone.
30. (new) The implant of claim 19, in combination with a fusion promoting material.
31. (new) The implant of claim 30, wherein said fusion promoting material includes bone.